

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC TARIFF FILING OF KENTUCKY)
UTILITIES COMPANY FOR APPROVAL OF AN)
ECONOMIC DEVELOPMENT RIDER SPECIAL) **CASE NO. 2022-00371**
CONTRACT WITH BITIKI-KY, LLC)

RESPONSE OF
KENTUCKY UTILITIES COMPANY
TO
COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION
DATED DECEMBER 21, 2022

FILED: JANUARY 9, 2023

KENTUCKY UTILITIES COMPANY

Response to Commission Staff's Second Request for Information
Dated December 21, 2022

Case No. 2022-00371

Question No. 1

Responding Witness: John Bevington

Q-1. Refer to KU's Response to Commission Staff's First Request For Information (Staff's First Request), Item 3.

- a. Given that the cryptocurrency markets are exceptionally volatile, explain KU's credit risk assessment criteria for businesses participating in volatile markets or business activity.
- b. Explain what events could occur that would cause KU to require Bitiki-KY, LLC (Bitiki) to submit an additional deposit.
- c. Explain whether the \$1,275,000 deposit is based upon 2/12 of Bitiki's expected annual billing at full non-discounted Standard Rate Schedule rates. If not, explain the basis for the deposit amount.

A-1.

- a. KU does not take a position regarding the volatility of cryptocurrency markets. KU does not have special credit risk assessment criteria for new customers participating in volatile markets or business activity; rather, KU applies the same credit and payment criteria to all customers.

In addition, KU does not evaluate market risk in determining which customers are eligible for EDR contracts because such an evaluation is not included in KU's Rider EDR eligibility criteria. Instead, in accordance with its tariff criteria KU relies on economic development evaluations performed by Kentucky Economic Development Finance Authority.¹ The Kentucky Economic Development Finance Authority approved Bitiki's participation in the Kentucky Enterprise Initiative Act program, making Bitiki eligible for a Kentucky Sales and Use Tax refund of up to \$250,000.

¹ Kentucky Utilities Company, P.S.C. No. 20, Original Sheet No. 71.1.

For EDR customers that are new business entities, KU routinely requires a deposit that equals or is close to 2/12 of annual billing at full retail rates, which is the maximum initial deposit permitted by tariff. (As noted in response to part c below, KU required a deposit of nearly 2/12 of annual billing at full retail rates for Bitiki.) KU could require additional initial deposits of EDR customers, but KU elected not to do so for Bitiki, which is taking service at a site that required no additional investment from KU; indeed, Bitiki is taking service at a site where existing facilities were unused prior to Bitiki's beginning to take service. Therefore, revenues from Bitiki in excess of its marginal costs of service do and will contribute to offsetting KU's fixed costs, which is a benefit for all customers.

- b. The events that could occur that would cause KU to require Bitiki to submit an additional deposit are the same as those that would cause KU to require any other customer to submit an additional deposit, e.g., history of late or partial payments or bankruptcy.
- c. The \$1,275,000 deposit is based upon 2/12 of Bitiki's expected annual billing at full non-discounted Standard Rate Schedule rates.

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Question No. 2

Responding Witness: Michael E. Hornung

- Q-2. Refer to KU's Response to Staff's First Request, Item 5. KU explains that the total cost of the incremental elements enumerated in the table are too high. However, it does not explain why each of the individual elements are not applicable. Explain why each of the incremental cost elements are or are not applicable.
- A-2. KU respectfully disagrees with the premise of the request. As noted in KU's response to PSC 1-5, KU explained at length in Case No. 2020-00349 why it disagreed with the Commission's NMS-2 avoided cost methodology; all of those reasons remain valid.² Rather than repeat those arguments at length here, KU incorporates them by reference.³

KU further noted in its response to PSC 1-5 that the data from Case No. 2020-00349 is now stale and that "[t]he more current data used in the marginal cost study is more appropriate to use to estimate marginal costs of service today and for the next five years."

KU's response further noted that not only was the total NMS-2 avoided cost rate unreasonable, but even using only the capacity-related components was unreasonable:

A similar result obtains when considering only the avoided capacity components of the NMS-2 rate (avoided generation, transmission, and distribution capacity, totaling \$0.03/kWh). Applying those avoided costs to Bitiki's assumed average monthly usage (9,015,500 kWh) results in \$272,538.57 per month, which exceeds the

² See, e.g., *Electronic Application of Kentucky Utilities Company for an Adjustment of Its Electric Rates, a Certificate of Public Convenience and Necessity to Deploy Advanced Metering Infrastructure, Approval of Certain Regulatory and Accounting Treatments, and Establishment of a One-Year Surcredit*, Case No. 2020-00349, Joint Petition for Reconsideration of the September 24, 2021 Order (Oct. 15, 2021); Case No. 2020-00349, Reply to the Kentucky Solar Industries Association, Inc.'s and the Joint Intervenors' Responses to Kentucky Utilities Company and Louisville Gas and Electric Company's Petition for Reconsideration (Oct. 27, 2021).

³ See *id.*

estimated full monthly retail demand charges (Base, Intermediate, and Peak) under Rate RTS (\$237,900) by about \$35,000 per month.

KU would further observe that a similarly unreasonable result obtains when applying only the avoided generation and transmission capacity components: an avoided cost of \$255,859.89, which again exceeds the estimated full monthly retail demand charges (Base, Intermediate, and Peak) under Rate RTS (\$237,900) by almost \$20,000 per month. This too shows the unreasonableness of the NMS-2 avoided cost components per se—even only the generation and transmission components—as well as their application here: It is clearly incorrect that the marginal cost of adding a customer at a site where no transmission investment is required and when the Companies' soonest generation need is more than five years in the future could be greater than *the full retail demand charges* for that customer, which are designed to recover the full embedded cost of all transmission and generation facilities.

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Question No. 3

Responding Witness: Michael E. Hornung

- Q-3. Refer to the application, Special Contract Economic Development Rider. Confirm that the customer will receive demand discounts for the first five years of the ten -year contract only and that there are no other discounted tariffed rates associated with the addition of this customer.
- A-3. Confirmed.

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Question No. 4

Responding Witness: Michael E. Hornung

Q-4. Refer to the Application generally and KU's Response to the Joint Intervenors' First Request, Item 26, Attachment.

- a. Provide an update to the Attachment showing the comparison on an annual basis with the annual discounted rates rather than the five-year average rate.
- b. Provide the annual costs and revenues of this special contract demonstrating that there will be a net profit associated with the addition of this customer over the life of the ten-year contract.

A-4.

- a. See the attachment being provided in Excel format. Note that the attached calculations do not account for Fuel Adjustment Clause ("FAC") or Environmental Surcharge adjustment clause revenues, both of which Bitiki does and will continue to pay. Those revenues are significant. For example, as shown in the attachment to JI 2-7(a), Bitiki's FAC charges in the four billing periods that Bitiki has been a KU customer far exceed the apparent *annual* shortfall of revenues versus marginal costs in Year 1. Thus, there is every reason to expect that Bitiki's revenues will exceed its marginal costs in each year of the EDR contract term.
- b. See the response to part a.

The attachment is being provided in a separate file in Excel format.

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Question No. 5

Responding Witness: John Bevington / Michael E. Hornung

Q-5. Refer to KU's response to the Joint Intervenors' First Request For Information, Item 7. To the extent that there are any, describe and, if possible, quantify any marginal or incremental benefits associated with this project.

A-5. KU's response to JI 1-7 stated:

KU will not make any transmission, grid, or infrastructure investments to serve the proposed load. Facilities necessary to serve the proposed load already exist due to previous operations at the site. This customer's operations would make productive use of facilities that are currently idle and might remain so absent this customer beginning operations at the site.

Therefore, KU assumes this request pertains to benefits related to costs and cost recovery related to "transmission, grid, or infrastructure investments."

One way of evaluating such benefits would be to compare the base demand revenues from Bitiki to the marginal transmission cost of adding the customer. As KU explained in Case No. 2020-00349, for customers on rate structures like Rate RTS (on which KU serves Bitiki), KU has structured the base demand charge to recover transmission and distribution costs and the intermediate and peak demand charges to recover generation costs.⁴ As noted in KU's response to PSC 1-3, even using coincident peak marginal costs, Bitiki's marginal transmission cost is about \$260 per month, and as KU noted in its response to JI 1-7, no additional transmission investment was needed to connect Bitiki at the site it selected. Even using the first year's 50% EDR demand discount, Bitiki's base demand revenues at full load (13 MW) would be \$14,040 per month.⁵ Therefore, Bitiki's net marginal benefit related to "transmission, grid, or infrastructure investments" relative to the site's remaining unused is about \$13,780 per month at the maximum demand charge discount level and about \$27,820 per month at full base demand charge rates.

⁴ See, e.g., Case No. 2020-00349, Direct Testimony of W. Steven Seelye at 31-32 (Nov. 25, 2020).

⁵ The current Rate RTS base demand charge is \$2.16/kW-month. Thus, \$2.16/kW-month x 13,000 kW of base demand equals \$28,080, half of which is \$14,040.

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Question No. 6

Responding Witness: Stuart A. Wilson

- Q-6. Refer to KU's response to the Joint Intervenors' First Request for Information, Item 13, Attachment and Case No. 2021-00393,⁶ IRP, Volume 1, Section 8, Table 8-1 on page 8-1 and Table 8-2 on page 8-2.
- a. Regarding the attachment to the Joint Intervenors' response, describe the changes that are illustrated in each of the rows over the forecast period.
 - b. Reconcile and describe all differences between the attachment to the Joint Intervenors' response and Tables 8-1 and 8-2 of the IRP.
 - c. Refer also to Case No. 2022-00402.⁷ Reconcile and explain the differences between both the demand and supply side resources described in Case No. 2022-00402 with the information presented in the attachment to the Joint Intervenors' response.
- A-6.
- a. By "forecast period," KU assumes the request refers to the five-year period relevant to the Bitiki EDR contract for marginal cost analysis, i.e., 2023-2027. Except the Gross Peak Load, Net Peak Load, and Solar PPA rows, all rows in the JI 1-13 attachment and 2021 IRP Tables 8-1 and 8-2 are the same. Load in the JI 1-13 attachment increases over the forecast period as the addition of the BlueOval SK load is only partially offset by the impacts of DSM programs and customer-initiated energy efficiency improvements. 2021 IRP Tables 8-1 and 8-2 did not include the BlueOval SK load. Solar PPAs in the JI 1-13 attachment includes the estimated generation at the time of peak for the Rhudes Creek PPA (100 MW nameplate) beginning in 2023 and the Ragland

⁶ Case No. 2021-00393, Electronic 2021 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company (filed Oct. 19, 2021).

⁷ Case No. 2022-00402, Electronic Joint Application of Kentucky Utilities Company and Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Site Compatibility Certificates and Approval of a Demand Side Management Plan (filed Dec. 15, 2022).

PPA (125 MW nameplate) beginning in 2025. 2021 IRP Tables 8-1 and 8-2 assumed the nameplate capacity for the Ragland PPA would be 160 MW.

For the other rows, DLC comprises the Companies' dispatchable DSM programs and is forecasted to diminish slowly over time. Coal retirements reflect the retirement of Mill Creek 1 at the end of 2024 and the assumption that Mill Creek 1 and 2 cannot be operated simultaneously during ozone season due to NOx limits. The Companies' small-frame SCCTs, Haefling 1-2 and Paddy's Run 12, are assumed to retire by 2025.

- b. See the response to part a.
- c. For demand side resources, Case No. 2022-00402 includes the impacts of KU and LG&E's proposed Demand-Side Management and Energy Efficiency Program Plan. Supply side resources in Case No. 2022-00402 are not materially different from the JI 1-13 attachment over the relevant five-year forecast period (2023-2027). Beginning in 2024, existing generation resources are 29 MWs higher in the summer and 8 MWs higher in the winter due to efficiency improvements at Cane Run 7.